

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

ORIGINAL

FIELD NOTES

OF

THE DEPENDENT RESURVEY OF

A PORTION OF THE SOUTH AND NORTH BOUNDARIES,

AND

THE EAST BOUNDARY OF BRYCE CANYON NATIONAL PARK,

IN

**TOWNSHIP 38 SOUTH, RANGE 4 WEST,**

OF THE SALT LAKE MERIDIAN  
IN THE STATE OF UTAH

EXECUTED BY

**Scott A. Burkhardt**  
**Cadastral Surveyor**

Under Special Instructions dated and approved **August 11, 2014**, which provided for the surveys included under Group No. **1249**, and Assignment Instructions dated **August 11, 2014**.

Survey Commenced, **August 13, 2014**  
Survey Completed, **August 27, 2014**

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## TOWNSHIP 38 SOUTH, RANGE 4 WEST, SALT LAKE MERIDIAN, UTAH

The following field notes describe the dependent resurvey of a portion of the south and north boundaries, and the east boundary of Bryce Canyon National Park, in T. 38 S., R. 4 W., Salt Lake Meridian, Utah.

## HISTORY OF SURVEYS

Surveyed by		Retr. or Resurveyed by	
<b>SOUTH BOUNDARY</b>			
All	L.A. Snow	1908	
Portion		J.L. Hyatt & H.D. Badger	1970-71
Portion		G.V. Olson	1974
Portion		R.A. Zaninovich	1987
<b>EAST BOUNDARY (Emery Valley Guide Meridian)</b>			
All	W. Lewman & J.H. Clark	1904	
Portion		R.C. Yundt	1950
Portion		J.L. Hyatt & H.D. Badger	1970-71
<b>WEST BOUNDARY (First Guide Meridian East)</b>			
All	E. Bird & A. Nelson	1941-42	
Portion		R.A. Zaninovich	1987
<b>NORTH BOUNDARY</b>			
All	E. Bird & A. Nelson	1944	
Portion		R.C. Yundt	1950
Portion		K.P. Hendrex	1972
Portion		G.V. Olson	1974
<b>SUBDIVISION</b>			
Portion	R.C. Yundt	1950	
Portion	J.L. Hyatt & H.D. Badger	1970-71	
Portion	G.V. Olson	1974	
Portion	R.A. Zaninovich	1987	
<b>EAST BOUNDARY OF BCNP</b>			
All	G.V. Olson	1974	

## TOWNSHIP 38 SOUTH, RANGE 4 WEST, SALT LAKE MERIDIAN, UTAH

The survey was executed in accordance with the specifications set forth in the Manual of Surveying Instructions, 2009, and the Special Instructions for Group No. 1249, dated August 11, 2014.

The direction of each line is with reference to the true meridian, established by Global Positioning System (GPS) utilizing Real-Time Kinematic (RTK) techniques throughout the survey. The positional accuracy of this survey complies with the *Standards for the Positional Accuracy of Cadastral Surveys When Using Global Navigation Satellite Systems (GNSS)*, dated February 23, 2009. Trimble model R8 GPS receivers were used for field collection. Cadastral Automated Plat Drafting (CAPD) software was the primary software utilized for project calculations.

Preliminary to the resurvey, the lines of the prior surveys were retraced and a search was made for all corners and other calls of record. Identified corners were remonumented in their original positions. Lost corners were reestablished and remonumented at proportionate positions based on the official record. The retracement data were thoroughly verified and only the true line field notes are given herein.

Geodetic control was derived from GPS static observations, post processed by National Geodetic Survey, Online Positioning User Service (OPUS), utilizing Continuously Operating Reference Stations (CORS): DI2242 P009 MARYSVALE\_UT2006 CORS ARP, AI8817 ECHO ECHO\_BRGN\_NV1999 CORS ARP, and DK8419 AZPG CITY OF PAGE CORS ARP.

The geographic position of the south 1/4 section corner of section 32 only, T. 37 S., R. 4 W., as determined by direct RTK methods from the National Geodetic Survey OPUS solution, is as follows:

Latitude: **37°32'12.632" N.**

Longitude: **112°14'48.735" W.**, N.A.D. 83 (2011), EPOCH: 2010.00,

Network Accuracy = 0.200 meter at 95% confidence.

The geographic position of the south 1/4 section corner of section 33 only, T. 38 S., R. 4 W., as determined by direct RTK methods from the National Geodetic Survey OPUS solution, is as follows:

Latitude: **37°26'59.192" N.**,

Longitude: **112°13'42.723" W.**, N.A.D. 83, (2011), EPOCH: 2010.00,

Network Accuracy = 0.200 meter at 95% confidence.

DEPENDENT RESURVEY OF A PORTION OF THE SOUTH BOUNDARY,  
TOWNSHIP 38 SOUTH, RANGE 4 WEST, SALT LAKE MERIDIAN, UTAH

CHAINS

Dependent Resurvey of a Portion of the South Boundary,  
T. 38 S., R. 4 W., Salt Lake Meridian, Utah

Reestablishment of the Survey Executed by L.A. Snow in 1908,  
and the Dependent Resurveys by G.V. Olsen in 1974,  
and R.A. Zaninovich in 1987

Beginning at the 1/4 section corner of section 3 only, T. 39 S.,  
R. 4 W., monumented with an iron post, 2 1/2 inches diameter,  
firmly set, flush in the ground, with brass cap marked as  
described in the official record of the 1987 resurvey; with a  
mound of stone, 4 feet base, 2 feet high, south of the corner.

From the corner, a fenceline, steel post and 4-strand barbed  
wire, extending north and south, bears east, 7 feet distance.

**S. 89°54.4' E.**, between sections 3 and 33.

- 5.551** The 1/4 section corner of section 33 only, monumented with an  
iron post, 2 1/2 inches diameter, firmly set, projecting 1 inch  
above the ground, with brass cap marked as described in the 1974  
resurvey; with a mound of stone, 4 feet base, 1 foot high, north  
of the corner.

From which the 1974 bearing trees

A juniper, 17 inches diameter, bears S. 43°45' E., 55 links  
distance, marked X BT.

A juniper, 13 inches diameter, bears N. 70°30' W., 53 links  
distance, marked 1/4 S33 BT.

Dependent Resurvey of a Portion of the North Boundary,  
T. 38 S., R. 4 W., Salt Lake Meridian, Utah

Reestablishment of the Survey Executed by E. Bird and A. Nelson  
in 1944, and the Dependent Resurveys by K.P. Hendrix in 1972,  
and G.V. Olsen in 1974

From the corner of sections 32 and 33 only, T. 37 S., R. 4 W.,  
monumented with an iron post, 2 1/2 inches diameter, firmly set,  
flush with a mound of stone, 3 feet base, 1 1/2 feet high, with  
brass cap marked as described in the official record of the 1972  
resurvey.

From which the remaining 1944 bearing tree (tied in 1972)

A juniper, 18 inches diameter, bears S. 48° W., 30 links  
distance, marked BCNP.

DEPENDENT RESURVEY OF A PORTION OF THE NORTH BOUNDARY,  
TOWNSHIP 38 SOUTH, RANGE 4 WEST, SALT LAKE MERIDIAN, UTAH

CHAINS

**S. 88° 31.6' W.** along the north boundary of the township.

- 5.214** The closing corner of the east boundary of Bryce Canyon National Park, monumented with an iron post, 2 1/2 inches diameter, firmly set, projecting 5 inches above the ground, with brass cap marked as described in the official record of the 1974 survey.

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**N. 89° 43.3' W** , beginning new measurement.

- 34.839** The 1/4 section corner of section 32 only, T. 37 S., R. 4 W., monumented with an iron post, 1 inch diameter, firmly set, projecting 2 inches above the ground, with brass cap re-marked as described in the official record of the 1974 resurvey.

From which the 1944 bearing trees (tied in 1974)

A pine, 13 inches diameter, bears S. 48° 15' E., 50 links distance, with a healed-over blaze (record: marked 1/4 S5 BT).

A fir, 13 inches diameter, bears N. 55° 30' W., 35 links distance, with a healed-over blaze (record: bears S. 55° 30' W., marked 1/4 S32 BT).

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Dependent Resurvey of  
the East Boundary of Bryce Canyon National Park,  
T. 38 S., R. 4 W., Salt Lake Meridian, Utah

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Reestablishment of the Survey Executed by G.V. Olsen in 1974

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From the 1/4 section corner of section 33 only, on the south boundary of the township, hereinbefore described.

**N. 0° 42.0' W.**, along the east boundary of Bryce Canyon National Park.

- 40.053** The 0 (zero) Mile Post plus 40.00 chains, monumented with an iron post, 2 1/2 inches diameter, firmly set, projecting 1 inch above the ground, with brass cap marked as described in the official record of the 1974 survey.

From which the 1974 bearing trees

A pine, 17 inches diameter, bears N. 71° 30' E., 36 links distance, with a healed-over blaze (record: marked BCNP BT).

A pine, 14 inches diameter, bears N. 80° 15' W., 26 links distance, with a healed-over blaze (record: marked BCNP BT).

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DEPENDENT RESURVEY OF  
THE EAST BOUNDARY OF BRYCE CANYON NATIONAL PARK,  
TOWNSHIP 38 SOUTH, RANGE 4 WEST, SALT LAKE MERIDIAN, UTAH

CHAINS

**N. 89°57.3' E.**, continue along the Bryce Canyon National Park boundary.

- 40.445** The 0 (zero) Mile Post plus 79.83 chains, monumented with an iron post, 2 1/2 inches diameter, firmly set, projecting 2 inches above a mound of stone, 4 feet base, 1 foot high, with brass cap marked as described in the official record of the 1974 survey.

From which the 1974 bearing trees

A juniper, 10 inches diameter, bears S. 0°15' W., 44 links distance, marked BCNP 0+80 BT (record: marked PL OMP+79.83).

A pinion, 17 inches diameter, bears S. 72° W., 123 links distance, marked BCNP 0+80 BT (record: pine, marked PL OMP+79.83).

A juniper, 18 inches diameter, bears N. 4° W., 66 links distance, marked BCNP 0+80 BT (record: marked BCNP OMP+79.83).

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**N. 89°48.9' E.**, continue along the Bryce Canyon National Park boundary.

- 20.027** The 1 Mile Post plus 19.96 chains, monumented with an iron post, 2 1/2 inches diameter, firmly set, projecting 6 inches above the ground, with brass cap marked as described in the official record of the 1974 survey.

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**N. 0°20.7' W.**, continue along the Bryce Canyon National Park boundary.

- 40.009** The 1 Mile Post plus 59.96 chains, monumented with an iron post, 2 1/2 inches diameter, firmly set, projecting 4 inches above the ground, with brass cap marked as described in the official record of the 1974 survey.

From which the 1974 bearing trees

A pine, 12 inches diameter, bears N. 44°15' E., 76 links distance, marked PL 1 MP+59.96 BT.

A pine, 18 inches diameter, bears S. 25°45' E., 14 links distance, marked PL 1 MP+59.96 BT.

A pine, 12 inches diameter, bears N. 68°45' W., 71 links distance, with a partially healed over blaze (record: marked BCNP BT).

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**N. 0°10.7' W.**, continue along the Bryce Canyon National Park boundary.

DEPENDENT RESURVEY OF  
THE EAST BOUNDARY OF BRYCE CANYON NATIONAL PARK,  
TOWNSHIP 38 SOUTH, RANGE 4 WEST, SALT LAKE MERIDIAN, UTAH

CHAINS

- 39.974** The 2 Mile Post plus 19.96 chains, monumented with an iron post, 2 1/2 inches diameter, firmly set, projecting 2 inches above a collar of stone, 2 feet base, with brass cap marked as described in the official record of the 1974 survey.

From which the 1974 bearing trees

A fir, 30 inches diameter, bears S. 2°15' W., 77 links  
distance, marked BCNP 2 MP+19.96 BT.

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**N. 0°04.6' W.**, continue along the Bryce Canyon National Park boundary.

- 40.026** The 2 Mile Post plus 59.96 chains, monumented with an iron post, 2 1/2 inches diameter, firmly set, projecting 12 inches above a mound of stone, 3 feet base, 1 foot high, with brass cap marked as described in the official record of the 1974 survey.

From which the 1974 bearing trees

A pine, 20 inches diameter, bears N. 39°15' E., 97 links  
distance, marked PL 2 MP+59.96 BT.

A pine, 20 inches diameter, bears N. 35°45' W., 52 links  
distance, marked BCNP 2 MP+59.96 BT.

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**N. 0°15.0' W.**, continue along the Bryce Canyon National Park boundary.

- 40.076** The 3 Mile Post plus 19.96 chains, monumented with an iron post, 2 1/2 inches diameter, firmly set, projecting 5 inches above the ground, with brass cap marked as described in the official record of the 1974 survey.

From which the 1974 bearing trees

A pine, 30 inches diameter, bears S. 8°15' W., 47 links  
distance, with a healed blaze (record: marked BCNP  
3MP+19.96 BT).

An oak, 5 inches diameter, bears S. 55°30' W., 71 links  
distance, with a partially-healed blaze (record: marked X  
BT).

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**N. 0°53.7' W.**, continue along the Bryce Canyon National Park boundary.

- 40.019** The 3 Mile Post plus 59.96 chains, monumented with an iron post, 2 1/2 inches diameter, firmly set, projecting 4 inches above the ground, with brass cap marked as described in the official record of the 1974 survey.



DEPENDENT RESURVEY OF  
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From which the 1974 bearing trees

A juniper, 6 inches diameter, bears N. 10° E., 42 links distance, marked X BT.

An juniper, 12 inches diameter, bears S. 71°30' E., 50 links distance, marked PL 3 MP+59.96 BT.

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**S. 89°04.2' W.**, continue along the Bryce Canyon National Park boundary.

- 19.983** The 4 Mile Post plus 0.09 chains, monumented with an iron post, 2 1/2 inches diameter, firmly set, projecting 4 inches above the ground, with brass cap marked as described in the official record of the 1974 survey.

From which the 1974 bearing trees

A pine, 10 inches diameter, bears N. 52°30' W., 25 links distance, marked PL4MP+0.09BT.

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**S. 89°29.1' W.**, continue along the Bryce Canyon National Park boundary.

- 40.450** The 4 Mile Post plus 40.09 chains, monumented with an iron post, 2 1/2 inches diameter, firmly set, projecting 2 inches above the ground, with brass cap marked as described in the official record of the 1974 survey.

From which the 1974 bearing trees

An oak snag, 6 inches diameter, bears S. 10°41.5' E., 125 links distance, marked X BT (record: bears S. 9°15' E., 126 links distance).

A fir, 24 inches diameter, bears N. 81°45' W., 72 links distance, with healed-over blaze (record: marked PL 4 MP+40.09 BT).

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**S. 88°40.0' W.**, continue along the Bryce Canyon National Park boundary.

- 40.002** The 5 Mile Post plus 0.09 chains, monumented with an iron post, 2 1/2 inches diameter, firmly set, projecting 1 inch above a collar of stone, 2 feet base, with brass cap marked as described in the official record of the 1974 survey.

From which the 1974 bearing trees

A pine, 14 inches diameter, bears S. 51°15' W., 46 links distance, with healed-over blaze (record: marked BCNP 5

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THE EAST BOUNDARY OF BRYCE CANYON NATIONAL PARK,  
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MP+0.09 BT).

A pine, 17 inches diameter, bears N. 18°45' W., 49 links distance, with partially-healed blaze (record: marked PL 5 MP+0.09 BT).

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**S. 89°02.1' W.**, continue along the Bryce Canyon National Park boundary.

- 39.984** The 5 Mile Post plus 40.09 chains, monumented with an iron post, 2 1/2 inches diameter, firmly set, projecting 5 inches above the ground, with brass cap marked as described in the official record of the 1974 survey; with a mound of stone, 2 feet base, 2 feet high, west of the corner.

From which the 1974 bearing trees

A dead and leaning pine, 13 inches diameter, bears N. 24°45' E., 21 links distance, marked PL 5 MP+40.09 BT.

A ponderosa pine snag, 30 inches diameter, bears S. 55°30' W., 83 links distance, marked BCNP 5 MP+40.09 BT.

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**N. 1°04.1' W.**, continue along the Bryce Canyon National Park boundary.

- 40.202** The 6 Mile Post plus 0.09 chains, monumented with an iron post, 2 1/2 inches diameter, firmly set, projecting 5 inches above the ground, with brass cap marked as described in the official record of the 1974 survey.

From which the 1974 bearing trees

A pine, 16 inches diameter, bears S. 86°30' E., 33 links distance, with healed-over blaze (record: marked PL 6 MP+0.09 BT).

A fir, 12 inches diameter, bears S. 62°30' W., 18 links distance, with healed-over blaze (record: marked BCNP 6 MP+0.09 BT).

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**N. 0°56.0' W.**, continue along the Bryce Canyon National Park boundary.

- 39.819** The 6 Mile Post plus 40.09 chains, monumented with an iron post, 2 1/2 inches diameter, firmly set, projecting 3 inches above the ground, with brass cap marked as described in the official record of the 1974 survey; with a mound of stone, 2 feet base, 1 foot high, west of the corner.

From which the 1974 bearing trees

A pine, 15 inches diameter, bears N. 29°15' E., 24 links

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CHAINS

distance, with partially-healed blaze (record: marked PL 6 MP+40.09 BT).

A fir, 16 inches diameter, bears S. 89°45' W., 24 links  
distance, with healed-over blaze (record: marked BCNP BT).

Corner is located within dense tall trees.

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N. 1°00.3' W., continue along the Bryce Canyon National Park boundary.

- 40.011 The 7 Mile Post plus 0.09 chains, monumented with an iron post, 2 1/2 inches diameter, loosely set, projecting 8 inches above a mound of stone, 3 feet base, 2 feet high, with brass cap marked as described in the official record of the 1974 survey. Rehab mound of stone.

From which the 1974 bearing tree

A juniper, 9 inches diameter, bears N. 55° E., 45 links  
distance, marked X BT (record: marked PL 7 MP+0.09 BT).

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N. 1°00.3' W., continue along the Bryce Canyon National Park boundary.

- 40.147 The 7 Mile Post plus 40.09 chains, monumented with an iron post, 2 1/2 inches diameter, loosely set, projecting 4 inches above the ground, with brass cap marked as described in the official record of the 1974 survey.

From which the 1974 bearing trees

A fir, 8 inches diameter, bears S. 80°30' E., 74 links  
distance, with healed-over blaze (record: marked X BT).

A pine, 13 inches diameter, bears S. 20°30' W., 61 links  
distance, with healed-over blaze (record: marked BCNP BT).

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N. 89°06.2' E., continue along the Bryce Canyon National Park boundary.

- 40.001 The 8 Mile Post plus 0.09 chains, monumented with an iron post, 2 1/2 inches diameter, firmly set, projecting 7 inches above the ground, with brass cap marked as described in the official record of the 1974 survey.

From which the 1974 bearing trees

A fir, 17 inches diameter, bears S. 32°30' E., 34 links  
distance, with healed-over blaze (record: marked PL 8 MP+0.09 BT).

DEPENDENT RESURVEY OF  
THE EAST BOUNDARY OF BRYCE CANYON NATIONAL PARK,  
TOWNSHIP 38 SOUTH, RANGE 4 WEST, SALT LAKE MERIDIAN, UTAH

## CHAINS

A fir, 17 inches diameter, bears S. 64° W., 35 links distance, with partially-healed blaze (record: marked PL 8 MP+0.9 BT).

Corner is located immediately north of a fir tree, 12 inches diameter.

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N. 0°59.1' W., continue along the Bryce Canyon National Park boundary.

- 39.988** The 8 Mile Post plus 40.09 chains, monumented with an iron post, 2 1/2 inches diameter, firmly set, projecting 4 inches above the ground, in a collar of stone, 2 feet base, with brass cap marked as described in the official record of the 1974 survey.

From which the 1974 bearing trees

A pine, 17 inches diameter, bears S. 23°45' W., 42 links distance, marked BCNP 8 MP+40 BT (record: BCNP 8 MP+40.09 BT).

A pine, 8 inches diameter, bears S. 85° W., 15 links distance, marked BCNP BT.

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N. 0°52.3' W., continue along the Bryce Canyon National Park boundary.

- 41.652** The closing corner of the east boundary of Bryce Canyon National Park, at intersection with the north boundary of the township, hereinbefore described.
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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**FIELD ASSISTANTS**

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Name	Capacity
Phil Freiberg	Survey Technician
Ron Baugh	Supervisory Cadastral Surveyor
Cait	American Conservation Experience
David Frye	A.C.E. Leader
Matthieu Aicardi	A.C.E. Leader
Julius Bering	A.C.E. Worker
Billie Bradnum	A.C.E. Worker
Troels Gregersen	A.C.E. Worker
Ana Guzman	A.C.E. Worker
Joseph Keller	A.C.E. Worker
Ciaran Tangney	A.C.E. Worker

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## CERTIFICATE OF SURVEY

I, *Scott A. Burkhardt, Cadastral Surveyor*, HEREBY CERTIFY upon honor, that in pursuance of Special Instructions bearing the date of the *11<sup>th</sup> day of August, 2014*, I have *dependently resurveyed a portion of the south and north boundaries of the township, and the east boundary of Bryce Canyon National Park, in Township 38 South, Range 4 West*, of the *Salt Lake Meridian*, in the State of *Utah*, which are represented in the foregoing field notes as having been executed by me and under my direction; and that said survey has been made in strict conformity with said Special Instructions, the Manual of Instructions for the Survey of the Public Lands of the United States, and in specific manner described in the foregoing field notes.

August 14, 2015

Date

Scott A. Burkhardt

Cadastral Surveyor

## CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT  
Salt Lake City, Utah

The foregoing field notes of the *dependent resurvey of a portion of the south and north boundaries of the township, and the east boundary of Bryce Canyon National Park, in Township 38 South, Range 4 West, Salt Lake Meridian, Utah*, executed by *Scott A. Burkhardt, Cadastral Surveyor*, having been critically examined and found correct, are hereby approved.

August 26, 2015

Date

Daniel W. Webb

Chief Cadastral Surveyor for Utah